

Remarks

The instant Office Action dated November 3, 2010 notes an objection to the title of the specification, and the following rejections: claims 23 and 25 stand rejected under 35 U.S.C. § 102(b) over Gardes (U.S. Patent No. 6,830,970); claims 24 and 26 stand rejected under 35 U.S.C. § 103(a) over the '970 reference in view of Hsuan (U.S. Patent Pub. 2001/0005046); claims 1, 3, 5-8, 10, 20-23, 25 and 27 stand rejected under 35 U.S.C. § 103(a) over Chudzik (U.S. Patent No. 7,030,481) in view of Gambino (U.S. Patent No. 6,025,226); and claim 1 stands rejected under 35 U.S.C. § 103(a) over the '481 and '970 references. Claims 2, 4 and 9 are objected to but would be allowable if rewritten in independent form. In this discussion set forth below, Applicant traverses all rejections and further does not acquiesce to any rejection or averment in the instant Office Action unless Applicant expressly indicates otherwise.

Regarding the objection to the title of the specification, Applicant would respectfully decline the suggested title change since that title might be mistaken to suggest that the invention is something other than in the claims. Applicant would, however, be open to alternatives such as including in the title another noun that is common to each claim. The undersigned would gladly discuss this issue as appropriate over the telephone if the objection would be maintained.

The rejections of claims 23-26 cannot stand because the proposed corresponding structure from the cited reference(s) lacks correspondence. For example, claim 23 references dielectric material on the first and second sides of the substrate, whereas the asserted dielectric material 24 in the '970 reference is only on one side of the substrate, as relied up and asserted from the Office Action. Therefore, the proposed corresponding structure fails to correspond at least to dielectric material on both the first and second sides of the substrate. The rejections, as asserted in the Office Action, thus fail.

Applicant further traverses the § 103(a) rejections because there is no proper motivation for the proposed combination of teachings and, to the extent the rationale of the previous rejection is continued with these rejections, for lack of correspondence as previously explained. As for the statement at page 11 of the Office Action regarding the teaching of Gambino, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Chudzik '481 reference with

the teaching of Gambino to have a single deposition layer of dielectric material on the first and second sides of the substrate, on the conductive material lining each of the trenches, and on the walls of the vertical interconnect because a single deposition layer eliminates the need for an additional step to pattern the dielectric layer. Applicant fails to see how this modification would be implemented and/or be useful for the purposes intended by the '481 reference. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main ('481) reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007) ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."). *See also In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (A §103 rejection cannot be maintained when the asserted modification undermines purpose of the main reference.).

In this instance, the teaching away in the '481 reference is evidenced in the reference itself, which explicitly teaches away from the combination with the Gambino reference as asserted. Specifically, the '481 reference acknowledges the method of manufacture of vertical interconnects as described in the '481 reference but there is no clear way of modifying the structure as proposed. The Office Action's conclusion that an additional step would be eliminated by the combination does not address that the § 103 burden for there to be some logical way to implement such a proposed structure.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Juergen Krause-Polstorff, of NXP Corporation at (408) 474-9062.

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